



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,295	01/15/2004	Masami Kashiwazaki	CANO:114	5169
37013	7590	04/19/2007	EXAMINER	
ROSSI, KIMMS & McDOWELL LLP. P.O. BOX 826 ASHBURN, VA 20146-0826			ZHU, RICHARD Z	
		ART UNIT	PAPER NUMBER	
		2609		
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	04/19/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/758,295	KASHIWAZAKI, MASAMI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Richard Z. Zhu	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 January 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/19/2005.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

*Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application JP 2003-008443 filed in Japan on January 16<sup>th</sup> of 2003. Certified copy of the Japanese Application had been received on February 6<sup>th</sup> of 2004.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 12 defines a computer program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed a computer program can range from paper on which the program is

written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on “computer-readable medium” or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5-6, and 9-12 are rejected under 35 USC 102 (b) as being anticipated by *Ramsay et al. (US 5502576 A)*.

Regarding Claims 1, 11 and 12, *Ramsay et al. (US 5502576 A)* discloses a document management system comprising:

a host computer [Figure 1, Terminal 14. Column 25, Rows 35 through 36];  
an image information processing apparatus [Column 25 through 26, see specifics below];

a document management server that manages electronic document data [Figure 1, Electronic Image Server 30 + Mass Storage 34. Column 26, Rows 20 through 30];

and a network that connects said host computer [Figure 1, Network 12 and High Speed Network 28. Column 25, Rows 38 through 44], said image information processing apparatus, and said document management server to each other [Column 25, Rows 64 through Column 26, Row 4];

and wherein said image information processing apparatus comprises:

an image information reading device that reads image information [Column 25, Rows 40 through 42. Figure 1, Digital Capture 18 and Analog Capture 32];

an output device that outputs the image information read by said image information reading device and print data output from said host computer [Column 25, Rows 40 through 42. Figure 1, Output 20];

a searching device that searches the electronic document data within said document management server for original electronic document data corresponding to electronic document data within the read image information [Column 26, Rows 37 through 41. Figure 1, Mainframe 16 and Mass Storage 34];

and a notifying device that notifies a result of search by said searching device [Column 26, Rows 41 through 49. Process of notification is achieve when Terminal 14 receives the image documents from Mass Storage 34, per user's request].

Regarding Claim 5, wherein said image information processing apparatus comprises an operating section, and said notifying device displays the result of search in said operating section [Column 25, Rows 49 through 50, the computers 14 has raster display or LCD projection screens. Column 26, Rows 49 through 50, the operator may process the retrieved image as desired.].

Regarding Claim 6, wherein said notifying device transmits an electronic mail with a file of the corresponding original document data attached thereto to an electronic mail address registered in said image information processing apparatus [Column 25, Row 43 and Column 26, Rows 44 through 49].

Regarding Claim 9, wherein said image information processing apparatus comprises: a printing device [Column 25, Row 43];

and a controller operable when original electronic document data corresponding to the electronic document data within the read image information is present within said document management server [Column 26, Rows 44 through 49], to cause said printing device to print the original electronic document data [Column 26, Rows 49 through 50. The operator, in this case, is the one to issue commands to the system and dictates its method of processing the retrieved image document. Therefore, the operator serves as the controller.]

Regarding Claim 10, wherein said image information processing apparatus comprises:

a storage device [Column 25, Rows 64 through 67, mass storage device 34]; and a controller operable when original electronic document data corresponding to the electronic document data within the read image information is present within said document management server, to provide control to store data obtained by rendering the original electronic document data in said storage device [Column 26, Row 55 through Column 27, Row 8].

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 USC 103 (a) as being unpatentable in view of *Ramsay et al. (US 5502576 A)* and *Seder et al. (US 2002/0164053 A1)*.

Regarding Claim 3, wherein said searching device comprises a watermarked information-sensing device [Column 8, Rows 35 through 50. This is the background introduction known to one ordinarily skilled in the art. It speaks of using 8-bit grayscale for document processing to “assure far greater certainty when verifying the integrity and authenticity of the electronic image” wherein 8-bit grayscale image contains background details such as watermark to verify and authenticate a document when a searching device attempts to locate a document in the server, Column 8, Rows 39 through 43. Therefore, Ramsay implicitly teach that the electronic image format disclosed in the embodiment contains details such as watermark].

While the disclosure does not explicitly teach that the Mass Storage 34 has a search device that senses watermark, but by disclosing that it is preferred to use 8 bit grayscale electronic image format that contains details such as watermark for the goal of document authentication and verification, it enables one ordinarily skilled in the art to incorporate watermark sensor into the searching device of Mass Storage 34.

Furthermore, in Paragraph [0029] of *Seder et al. (US 2002/0164053 A1)*, it is disclosed an optical sensor with decoder software that reads document identifier from watermark payloads and uses that to retrieve the document.

Therefore, it would've been obvious to one ordinarily skilled in the art to adapt the sensor of Mass Storage 34 of *Ramsay* with the watermark sensing capability of *Seder* in order to properly retrieve the needed image document whereas the motivation to combine can be located in *Ramsay et al. (US 5502576 A)* [Column 8, Rows 40 through 44] "assure far greater certainty when verifying the integrity and authenticity of electronic images.....".

7. Claim 4 is rejected under 35 USC 103 (a) as being unpatentable in view of *Ramsay et al. (US 5502576 A)*.

Regarding Claim 4, wherein said notifying device transmits the result of search as an electronic mail to an electronic mail address registered in said image information processing apparatus [In Column 25, Row 43, it is taught that each work station has a transmission interface 22 such as a modem, which is associated with internet and as a medium for electronic mail communication. Furthermore, in Column 26, Rows 44 through 49, it is taught that the search results are transmitted to the requesting computer via the high speed network 28 from the mass storage device.]

While the teaching does not explicitly disclose the usage of electronic mail to notify the user of the results of search, it enables one ordinarily skilled in the art at the time of invention to adapt the method of electronic mail as the technique for notification by disclosing a modem in the system whereas modem is commonly associated with internet communication techniques such as electronic mails.

Therefore, it would've been obvious to one ordinarily skilled in the art at the time of invention to use electronic mail as the prefer method of notifying the user of search results.

8. Claims 2 and 7-8 are rejected under 35 USC 103 (a) as being unpatentable over the combined teaching of *Ramsay et al. (US 5502576 A)* and *Cullen et al. (US 5893908 A)*.

The primary reference, *Ramsay et al. (US 5502576 A)* teaches the subject matters of Claim 1 from which Claims 2 and 7-8 are dependent upon. However, *Ramsay et al. (US 5502576 A)* does not teach that the search device uses optical character recognition for document retrieval of Claim 2, search results would indicate the location of the document in mass storage device or file server of Claim 7, and correspondence information indicative of priorities assigned according to degrees of correspondence of Claim 8.

*Cullen et al. (US 5893908 A)* teach these subject matters.

Regarding Claim 2, *Cullen et al. (US 5893908 A)* teaches wherein said searching device comprises a character recognition device [Column 7, Rows 12 through 37. More Specifically, Rows 30 through 37].

Therefore, it would've been obvious to one ordinarily skilled in the art at the time of invention to modify the search device of *Ramsay et al. (US 5502576 A)* with the additional capability of character recognition of *Cullen et al. (US 5893908 A)* in order to provide "an electronic document management system may provide automatic archiving of documents and retrieval without the need to navigate through a directory structure or specify a filename." [*Cullen et al. (US 5893908 A)*, Column 1, Row 64 through Column 2, Row 6].

Regarding Claim 7, wherein the result of search includes storage location information indicative of a location where the corresponding original electronic document data is stored [Column 5, Rows 13 through 16].

Therefore it would've been obvious to one ordinarily skilled in the art at the time of invention to for the result of search of *Ramsay* to include storage location information indicative of a location where the corresponding original electronic document data of *Ramsay* is stored as suggested by *Cullen* to "facilitate retrieval of the best match or further navigation through the document database" [*Cullen et al. (US 5893908 A)*, Column 6, Rows 10 through 13].

Regarding Claim 8, wherein in a case where a plurality of original electronic document files corresponding to the electronic document data within the output image information are searched out, the result of search includes correspondence information indicative of priorities assigned to the plurality of original electronic document files according to degrees of correspondence [Column 5, Rows 27 through 50. Here, the system lists the search results in descending order where the document with the most descriptors matching the user's document of interest is at the top].

Therefore, it would've been obvious to one ordinarily skilled in the art at the time of invention to adapt the method of listing search results base on matching descriptors as suggested by *Cullen et al. (US 5893908 A)* to the system of *Ramsay et al. (US 5502576 A)* in order to have "an electronic document management system that takes advantage of advanced document analysis techniques" [*Cullen et al. (US 5893908 A)*, Column 1, Rows 64 through 65] to facilitate the process of identifying the correct document being desire.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 545353 A, US 5530520 A, US 5671282 A, US 5754711 A, US 6324555 B1, and US 6330573 B1 are all prior arts relevant to the invention of image document storage and retrieval via a network.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Werner whose telephone number is 571-272-7401 and Richard Z. Zhu whose telephone number is 571-270-1587. The examiners can normally be reached on M-F, 8:00 - 4:30.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RZZ  
4/12/2007



**BRIAN WERNER**  
**SUPERVISORY PATENT EXAMINER**

Richard Z. Zhu  
Assistant Examiner  
Art Unit 2609